

# INTERNATIONAL SEARCH REPORT

International Application No  
PC/EP2004/011953

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61K51/04 A61K51/08 A61P35/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, CHEM ABS Data, EMBASE

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ZOBI, F. ET AL: "Toward novel binding metal complexes: Structure and basic kinetic data of 'M(9MeG)2(CH3OH)(CO)3!+(MO 99TC, Re)" INORG. CHEM, vol. 42, 4 May 2003 (2003-05-04), pages 2818-2820, XP008051339	1-5,7,8, 15,16, 19,21, 22,25, 29-31
Y	page 2818, column 2, paragraph 1; figure 1 page 2820, column 2, paragraph 2 ----- -/--	1-33

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

24 August 2005

Date of mailing of the international search report

09/09/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>ZHANG J ET AL: "Tricarbonylrhenium(I) complexes of phosphine-derivatized amines, amino acids and a model peptide: structures, solution behavior and cytotoxicity"</p> <p>JOURNAL OF ORGANOMETALLIC CHEMISTRY, ELSEVIER-SEQUOIA S.A. LAUSANNE, CH, vol. 650, no. 1-2, 1 May 2002 (2002-05-01), pages 123-132, XP004351213</p> <p>ISSN: 0022-328X</p> <p>see conclusions</p> <p>page 130, column 2; table 4</p>	1-6, 15-17, 19-21, 29-32
X	<p>ALBERTO R ET AL: "BASIC AQUEOUS CHEMISTRY OF <math>M(OH_2)_3(CO)_3^+(M=REM\ TC)</math> DIRECTED TOWARDS RADIOPHARMACEUTICAL APPLICATION"</p> <p>COORDINATION CHEMISTRY REVIEWS, ELSEVIER SCIENCE, AMSTERDAM, NL, vol. 190-192, 1999, pages 901-919, XP001074720</p> <p>ISSN: 0010-8545</p> <p>page 909</p> <p>page 914</p>	19-21, 29-31
X	<p>PIETZSCH H-J ET AL: "CHEMICAL AND BIOLOGICAL CHARACTERIZATION OF TECHNETIUM(I) AND RHENIUM(I) TRICARBONYL COMPLEXES WITH DITHIOETHER LIGANDS SERVING AS LINKERS FOR COUPLING THE <math>TC(CO)_3</math> AND <math>RE(CO)_3</math> MOIETIES TO BIOLOGICALLY ACTIVE MOLECULES"</p> <p>BIOCONJUGATE CHEMISTRY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 11, 2000, pages 414-424, XP001119310</p> <p>ISSN: 1043-1802</p> <p>see conclusions</p> <p>page 422, column 1; figure 4</p>	19,20, 23,24, 29-32
X	<p>WO 02/087633 A (BEIJING NORMAL UNIVERSITY)</p> <p>7 November 2002 (2002-11-07)</p> <p>claims 1-4,20,21; example 1</p>	19,24,29
Y	<p>BELLA LA R ET AL: "A <math>^{99m}Tc(I)</math>-postlabelled high affinity bombesin analogue as a potential tumor imaging agent"</p> <p>BIOCONJUGATE CHEMISTRY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 13, no. 3, 15 May 2002 (2002-05-15), pages 599-604, XP002218739</p> <p>ISSN: 1043-1802</p> <p>see conclusion</p> <p>abstract; figure 1</p>	1-33

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	R. ALBERTO: "'Tc(CO) <sub>3</sub> ! chemistry: a promising new concept for SPET" EUR J NUCL MED MOL IMAGING, vol. 30, September 2003 (2003-09), pages 1299-1302, XP008051330 page 1301, column 1, paragraph 1; figure 3	1-33
A	SCHIBLI R ET AL: "Influence of the denticity of ligand systems on the in vitro and in vivo behaviour of ' <sup>99m</sup> Tc(I)-tricarbonyl complexes: a hint for the future functionalisation of biomolecules" BIOCONJUGATE CHEMISTRY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 11, no. 3, May 2000 (2000-05), pages 345-351, XP002218742 ISSN: 1043-1802 abstract figure 1 see conclusion	1-33
P,X	WO 2004/022105 A (MALLINCKRODT INC; ALBERTO, ROGER; MUNDWILER, STEFAN) 18 March 2004 (2004-03-18) example 10; table 1; compound 13	19, 29, 32
E	WO 2004/097406 A (UNIVERSITAET ZUERICH; ALBERTO, ROGER; PAK, JAW, KYOUNG) 11 November 2004 (2004-11-11) page 13; examples 4,6 page 7, lines 15-20; claims 20,21	19, 21, 29, 32, 33
P,X	MUNDWILER S. ET AL: "Preparation of no-carrier added technetium- <sup>99m</sup> complexes via metal assisted cleavage from a solid phase" BIOCONJUGATE CHEM, vol. 15, 16 December 2003 (2003-12-16), pages 195-202, XP008051331 figure 5; compound 18	19, 20, 29-33
T	ZOBI F. ET AL: "Head-to-head (HH) and head-to-tail (HT) conformers of cis-bis guanine ligands bound to the 'Re(CO) <sub>3</sub> !+ core" INORGANIC CHEMISTRY, vol. 43, 17 February 2004 (2004-02-17), pages 2087-2096, XP008051340 abstract page 2088, column 1, paragraph 2 page 2095, column 2, paragraph 4 - page 2096, column 1	1-5, 7, 8, 15, 16, 19, 21, 22, 25, 29-31

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	<p>MUNDWILER S. ET AL: "A new '2+1! mixed ligand concept based on '99mTc(OH<sub>2</sub>)<sub>3</sub>(CO)<sub>3</sub>!+: a basic study" DALTON TRANS, 2 Apr11 2004 (2004-04-02), pages 1320-1328, XP008051349 see conclusion page 1324 - page 1325; figures 1,2; table 3</p> <p style="text-align: center;">-----</p>	<p>19,21, 23,24, 29-33</p>

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/011953

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 02087633	A	07-11-2002	CN	1322575 A		21-11-2001
			WO	02087633 A1		07-11-2002
			US	2003086873 A1		08-05-2003
WO 2004022105	A	18-03-2004	AU	2003268431 A1		29-03-2004
			CA	2497548 A1		18-03-2004
			EP	1536844 A2		08-06-2005
			WO	2004022105 A2		18-03-2004
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